INTERIM LABORATORY BIO-SAFETY GUIDELINES FOR HANDLING SARS SPECIMENS

Handling of <u>any</u> Clinical specimens →

I. Use **Standard Precautions/Universal precautions**
- Wear a lab coat and Use disposable gloves

Handling Specimens from a suspected SARS case, if meets CDC guidelines after review by MDCH Bureau of Epidemiology (517-335-8165):

II. Standard Precautions/Universal precautions as in I
PLUS
Goggles and a face shield or mask

Examples
a. Blood and Urine Specimens if it does not involve any aerosolization.
b. Routine examination of bacterial and mycotic cultures.
c. Routine staining and microscopic analysis of fixed smears.
d. Final packaging of specimens for transport to diagnostic laboratories for additional testing. Specimens should already be in a sealed, decontaminated primary container.
e. Molecular analysis of extracted nucleic acid preparations.
f. Electron microscopic studies with glutaraldehyde-fixed grids.
g. Pathologic examination and processing of formalin-fixed or otherwise inactivated tissues.

III. II + BSC or respiratory protection*
PLUS
Sealed centrifuge rotors or sample cups. Rotors and cups to be loaded in BSC.

Examples
a. Aliquoting and/or diluting specimens other than blood and urine
b. Inoculation of bacterial or mycological culture media.
c. Performing diagnostic tests that don't involve propagation of viral agents in vitro or in vivo.
d. Nucleic acid extraction procedures involving untreated specimens
e. Preparation and chemical- or heat-fixing of smears for microscopic analysis.

If these conditions are not available, do the risk assessment and allow minimum number of workers to be present during centrifugation.

IV. BSL 3 facility with BSL-3 work practices
a. Viral cell culture
b. Initial characterization of viral agents recovered in cultures of SARS specimens.

v. Animal BSL-3 facilities and Animal BSL-3 work practices
a. Inoculation of animals for potential recovery of the agent from SARS samples.
b. Protocols involving animal inoculation for characterization of putative SARS agents

***Acceptable methods of respiratory protection**
- A properly fit tested NIOSH approved filter respirator (N-95 or higher);
- or powered air-purifying respirators (PAPRs) equipped with high efficiency particulate air (HEPA) filters.
- Accurate fit testing is a key component of effective respirator use.
- Personnel who cannot wear fitted respirators because of facial hair or other fit-limitations should wear loose fitting hooded or helmeted PAPRs.

Ref: http://www.cdc.gov/ncidod/sars/lab.htm